

ZH->e e + b b

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23DEC04

Multi-Lepton Higgs Meeting

Jet Reconstruction Efficiencies

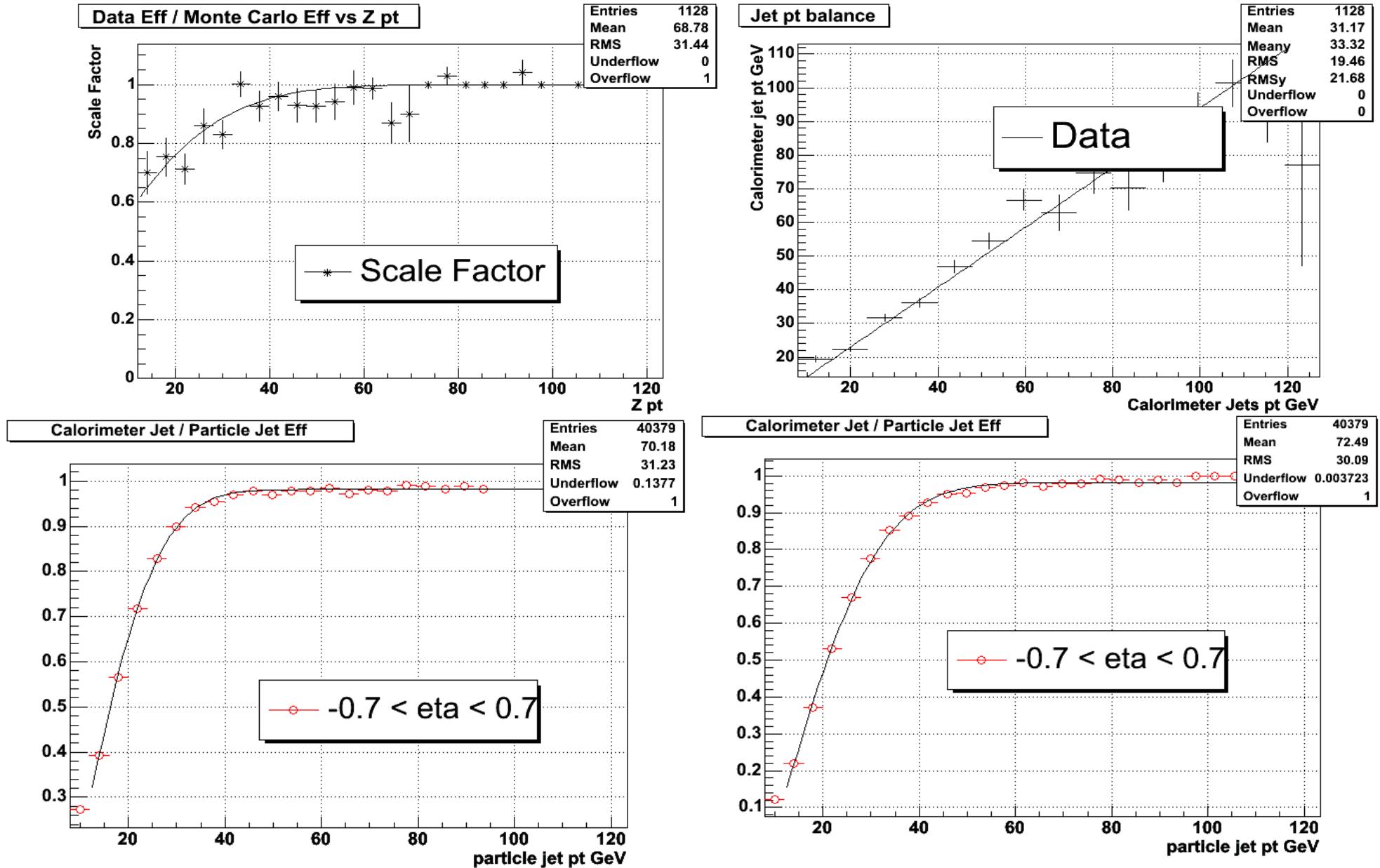
Scale Factor as function Z pt

Parameterization of Z pt to Cal Jet pt

MC Straight Eff – smeared particle jets, smeared cal jets

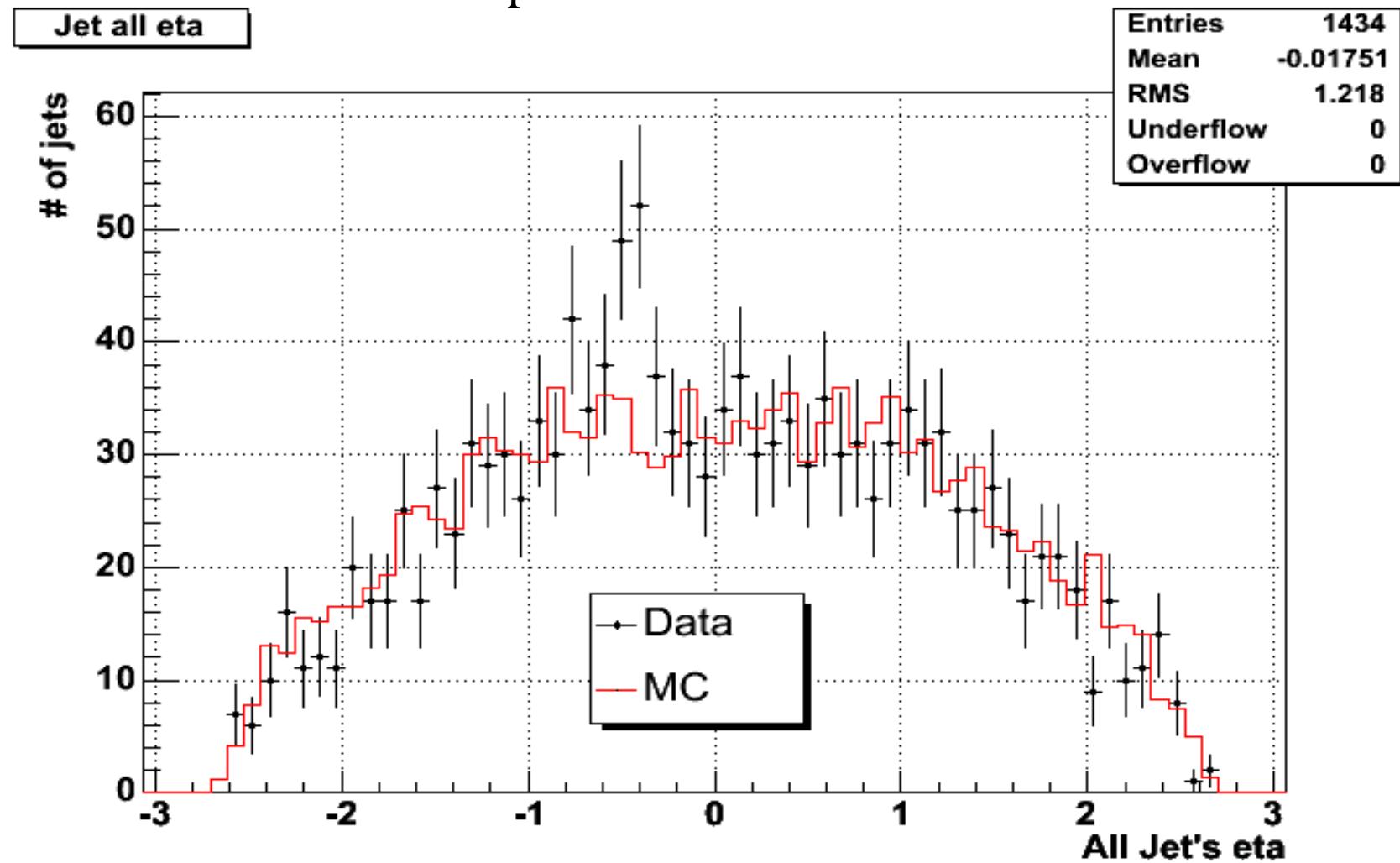
Data Straight Eff – smeared particle jets

Jet Reco Distributions



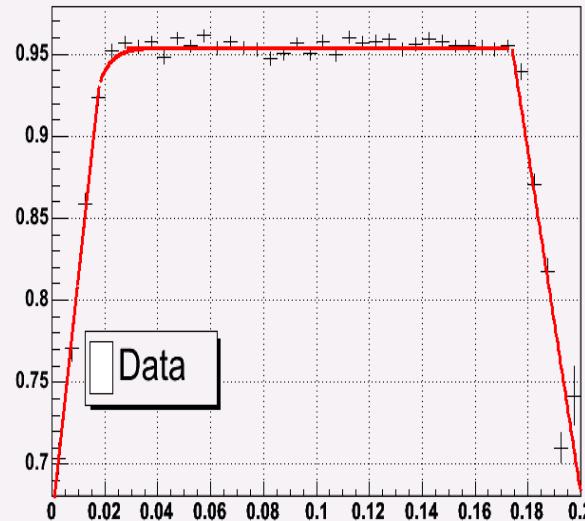
Jet Eta Distribution Data & MC

Jet pt > 15.0 GeV

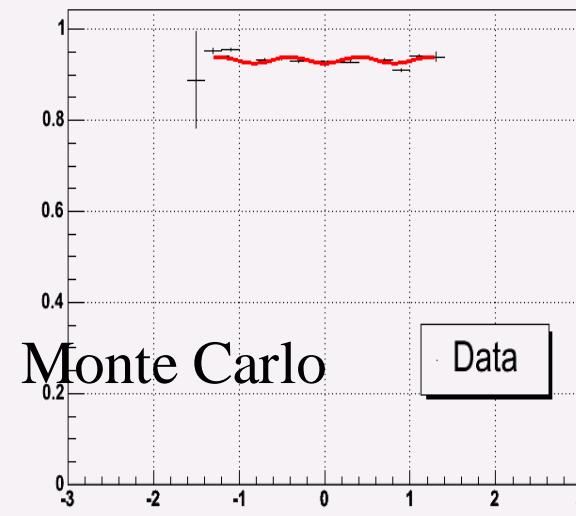


Electron Efficiencies

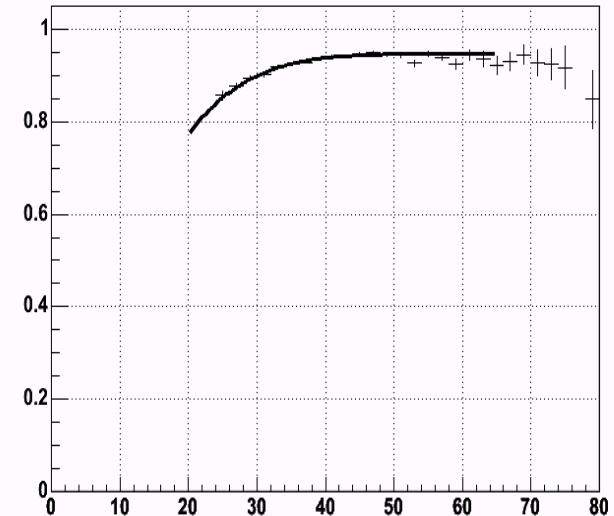
eff_EM_phi_0jet



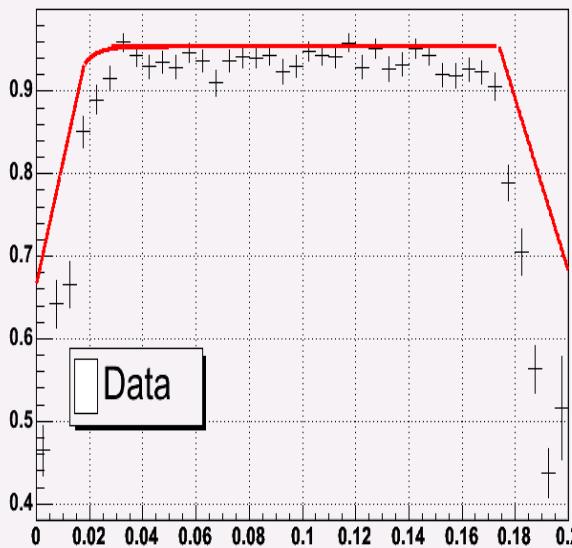
eff_EM_eta_0jet



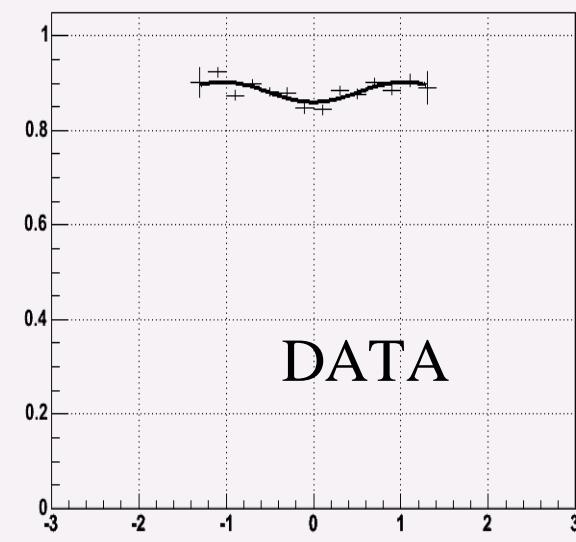
eff_EM_pt_0jet



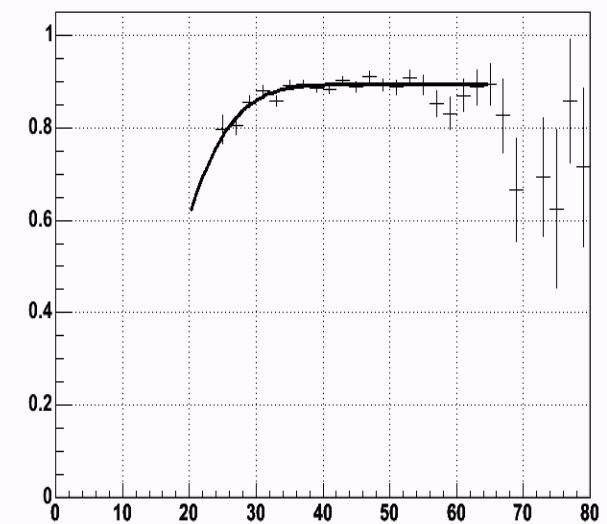
eff_EM_phi_0jet



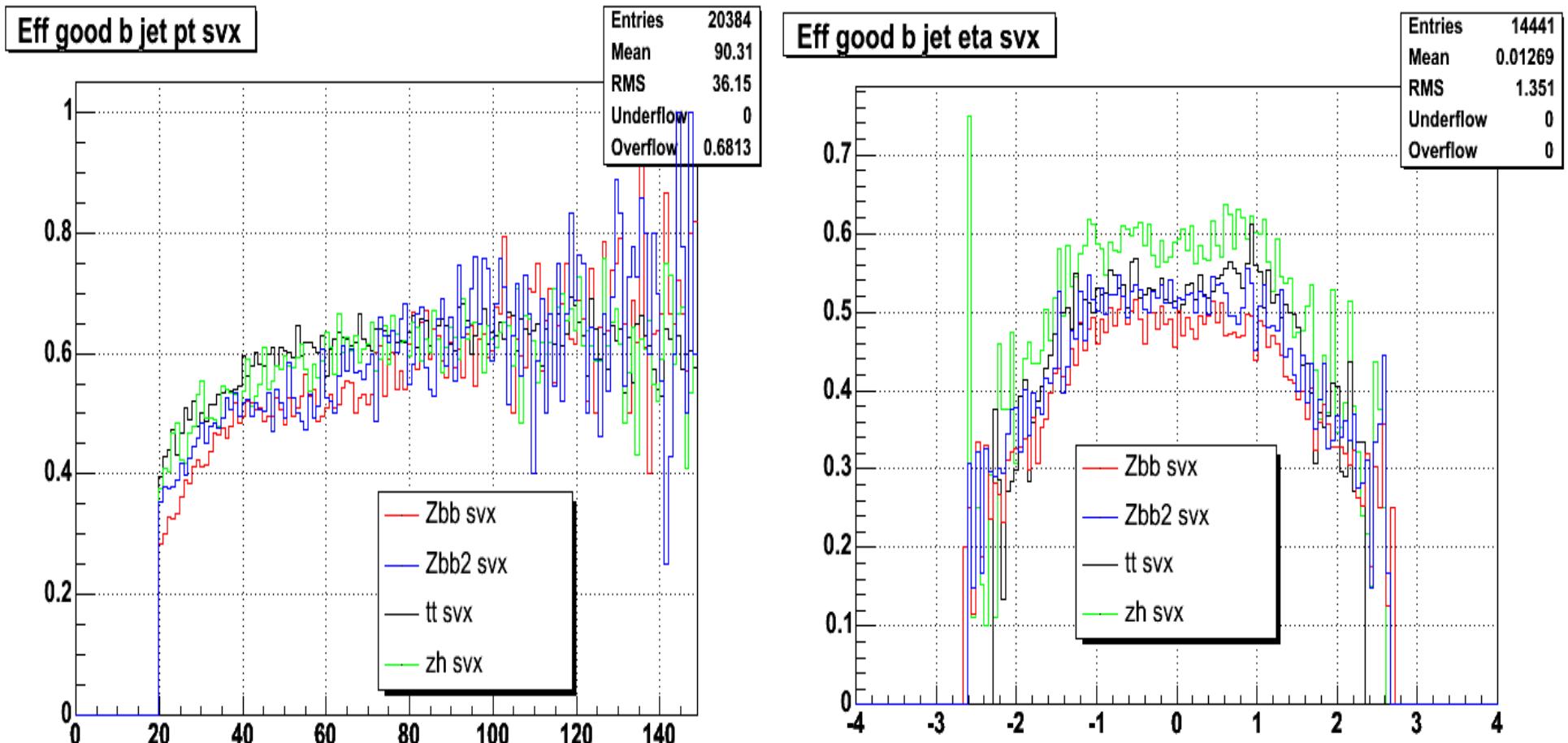
eff_EM_eta_0jet



eff_EM_pt_0jet

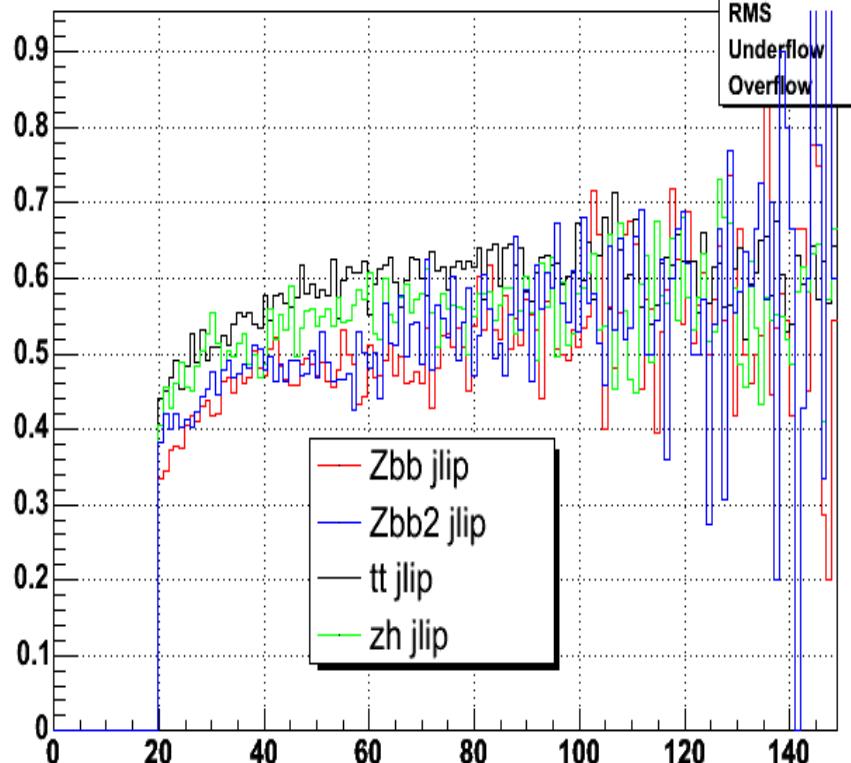


B Tagging Efficiencies

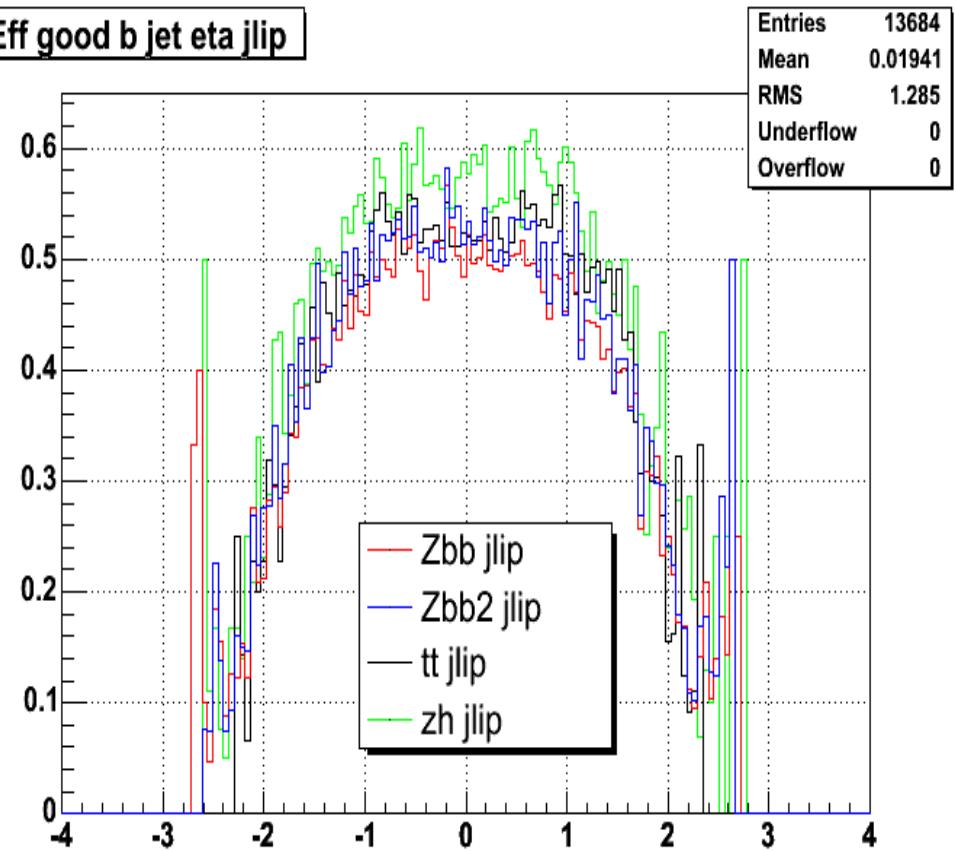


jlip

Eff good b jet pt jlip

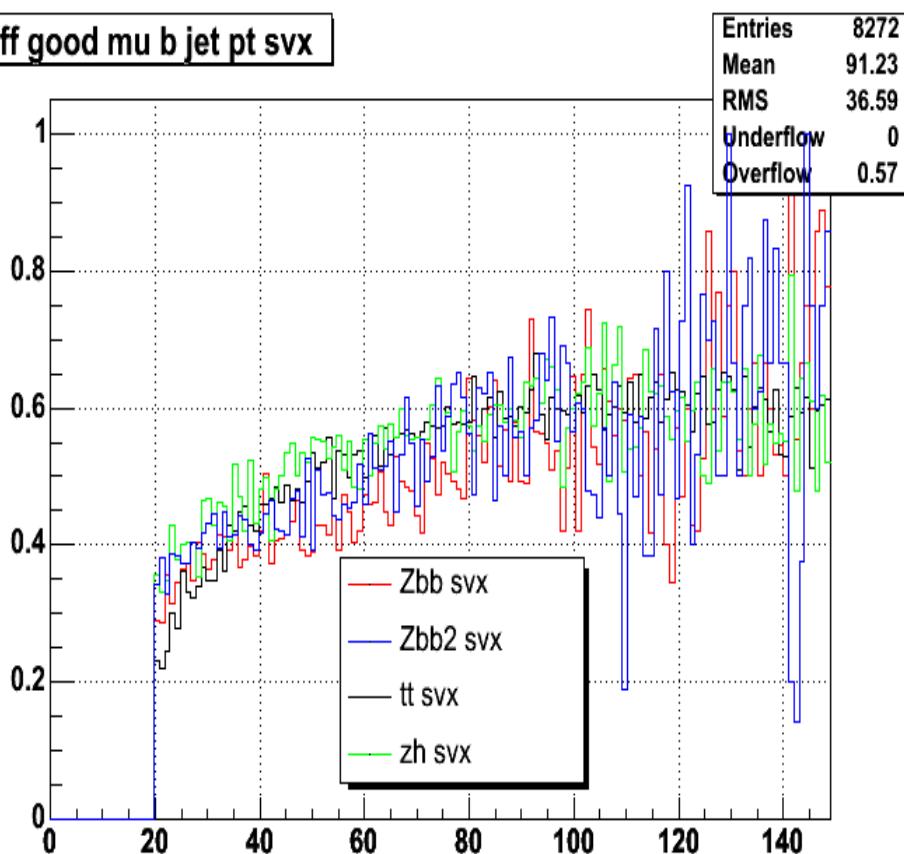


Eff good b jet eta jlip

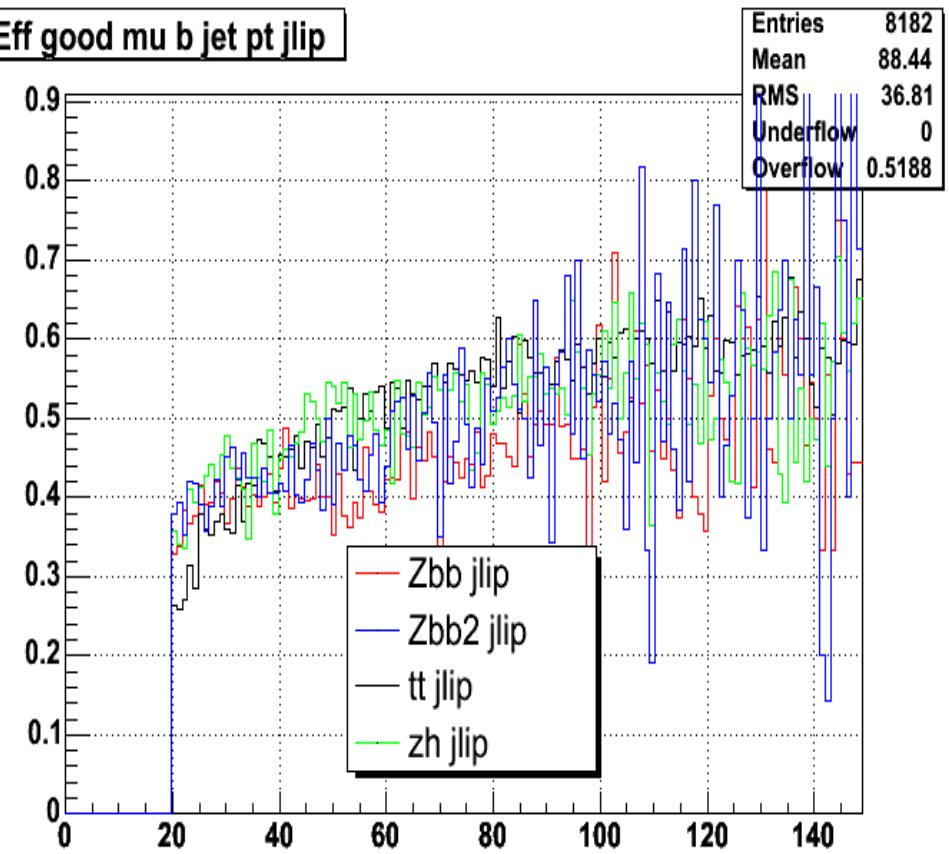


Start with mu in jet

Eff good mu b jet pt svx



Eff good mu b jet pt jlip



Pass 2 Monte Carlo Athenalized

Z->e e + X 400,000 normal + parton,particle,calorimeter jets

Zj->ee + j 188,250 normal + parton,particle,calorimeter jets

Zjj->ee + jj 272,000 normal jets

Zjjj->ee + jjj 14,750

W-> e + nu 244,820

qcd incl $160 < \text{jet pt} < 320$ 58,000

qcd incl $80 < \text{jet pt} < 160$ 102,000

ZH->ee + bb 29,000

tt->2b+2l 46,000

Zbb->ee + bb 98,000

Pass2 MC in progress for Athenalization

Qcd incl $40 < \text{jet pt} < 80$ - not ready

Qcd incl $20 < \text{jet pt} < 40$ - not ready

Qcd incl $10 < \text{jet pt} < 20$ - not ready

Z->tau tau - Alan was working on

gamma*/Z-> bb - I have not run

gamma*/Z->cc

ZZ incl

WZ incl

W+j-> e nu + j - problems finding the correct sample

W+jj-> e e nu + jj - problems finding the correct sample